

Abstract

Methods and apparatus for using a novel Care of Address option in a packet header which allows a mobile node to includes its HoA as the source address and its CoA in a new header field referred to herein as a CAO field are described. When the CAO is present, ingress filtering is performed by an access node on the address included in the CAO instead of the address in the source address, e.g., the HoA, or, is performed on the address in the CAO option field in cases where the source address does not pass ingress filtering, e.g., because the HoA corresponds to a different subnet than the access subnet due to the MN visiting a foreign subnet. Various flags may be included in the CAO field relating to security and/or processing operation to be performed by a receiving node.